# RECORDS MANAGEMENT APPLICATION SOFTWARE PILOT PROJECT: INTERIM QUALITATIVE STUDY

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#### INTRODUCTION

Networked computers are in widespread use in public sector, and their use is expected to grow as new digital government initiatives emerge. While they enable significant business process improvements, they also engender serious records management concerns. Most organizations' file management and record keeping methods were developed for paper-based record material and are being rendered obsolete or ineffective by electronic media. New Records Management Application (RMA) software, however, has the potential to improve the efficiency and accountability of business processes that rely on digital media.

For this reason, the Records and Forms Management Division in Michigan's Department of Management and Budget (DMB) has taken the lead in introducing and evaluating RMA software, ForeMost, on a trial basis among employees in DMB's Office of Support Services (OSS). Lessons learned from the pilot project are expected to inform and guide the development of electronic records management procedures more broadly in DMB as well as other Michigan state agencies.

This report presents a mid-project qualitative account of experiences with the introduction of RMA software and initial efforts to incorporate it into ongoing work practices among a subset of trial users. Findings from this inquiry, undertaken at about the half-way point in the pilot project, are intended to supplement information gathered at baseline by giving insights into positive and negative aspects of early RMA implementation stages. They should contribute to the development of improved strategies for implementing RMA software with future cohorts of employees; they might also yield suggestions that prove beneficial for current users as well.

In what follows, a brief project evaluation update is provided, and participants and procedures for the interim inquiry are described. Findings are presented next, and a discussion section concludes the report.

# PROJECT EVALUATION UPDATE

At the pilot project's mid-point, about 70 DMB employees were using ForeMost. Half of these users were trained in December 2000, with the remainder trained in January and February 2001.

Although introductory training occurred on schedule, technology problems (especially, problems with configuration of ForeMost for Microsoft Networking) meant that employees couldn't simply return to their offices and apply what they had just learned. Such delays, for the first groups trained, led to a slow start-up of actual use. Groups trained later (in January and February) fared better. By the mid-point of the pilot period, several improvements had already been made to the software; and further improvements (e.g., web-based access to ForeMost,

uniform filing procedures for Word, Excel and PowerPoint documents) were anticipated in the near future. In the meantime, the project team's efforts have been concentrated on increasing the incorporation of ForeMost into users' daily information work.

During this same time period, a number of changes to DMB units participating in the pilot project necessitated a shift in the evaluation focus. As the baseline study explained, two business processes had been singled out for evaluation emphasis: budget preparation, a regular, recurring process; and the forms and publications project, a one-time effort being conducted by a specially constituted team. Improvements to business processes remain the key outcomes by which ForeMost will be evaluated. However, changes in organization and staffing meant that the initially chosen processes would no longer be good targets for evaluating the business effects of RMA software among pilot users. Instead, evaluation will aim at two other sorts of outcomes: business process improvements that are generic, involving activities that are common to and significant in a variety of business missions; and business process improvements that are unit-specific but critical to that unit's mission.

Finally, in the area of implementation strategy, the project team designated a group of ForeMost "SuperUsers." Drawn from all units involved in the pilot project, SuperUsers are expected to meet regularly to share problems and problem-solving techniques; the group is intended to serve as a vehicle for migrating user-based innovations across their office.

# **Participants**

Participants in the interim qualitative study are 11 of the 70 current trial ForeMost users (or, over 15 percent of total users) drawn from the DMB units involved in the pilot project. They vary in job type, ranging from upper management to the shop floor. About half had taken part in the prior baseline qualitative study.

#### **Procedures**

Qualitative information was collected in semi-structured interviews by an external consultant to the project. These discussions took from 45 minutes to 90 minutes, averaging about an hour in length. After a brief account (or update) of the respondent's job functions, the interview covered a series of evaluation topics roughly paralleling the course of the RMA software implementation effort. It began with questions about file plan development and training, then asked about use of the RMA software and its effects on work, and ended by requesting recommendations and an overall evaluative judgment. Individual user interviews were supplemented by two group interviews with representatives of the project team.

## **FINDINGS**

Findings are presented below, following the order of the interview. Because interviews were given in confidence, none of the results are associated with specific individuals. When quotations are used, they are not attributed; rather, they are provided to illustrate the flavor of the comments made by interviewees.

## File Plan Development

Even before ForeMost training began, pilot users met with project team representatives to develop a file plan. The resulting system of files would become the basis for storing electronic documents in ForeMost.

For the majority of users, development of the plan was straightforward and readily captured their filing needs. Users cite two kinds of reasons for the success of file plan development. In some cases, employees had a well-developed file system in place; the ForeMost plan preserved these structures with minor changes. In other cases, employees chiefly worked in just one subject area; setting the system to default to that folder made filing very easy and convenient for such users.

For a small minority of participants, however, the first effort at file plan development did not work well--it needed considerable revision and modification. As one such user remarked, "It wasn't--and still isn't--easy to get modifications made to the plan." This point merits attention because several other users mentioned that, as they gained experience with the plan and made more use of the files, they were feeling the need for additions and changes. None had yet requested any modifications.

The project team should attempt to ensure that user-requested file plan modifications can be handled promptly and smoothly. In the meantime, two very positive reactions to the file plans as created are worth noting. Two participants remarked that having a viable and explicit file plan in place was especially helpful for those inheriting someone else's job; baseline interviews had anticipated such potential benefits. Another participant commented that having an established file plan gave a feeling of greater control over information work. Interestingly, this reaction is contrary to some of the expectations voiced in baseline interviews. Prior to file plan development, some pilot participants said they feared they would be losing control over their information environments to an imposed file plan. No such concerns were directly expressed in interim interviews. Ability to respond effectively to user-requested modifications will reinforce perceptions that the file plan helps employees control their information work (instead of feeling controlled by it).

## Training, Help and Outreach

The diverse set of pilot users hold remarkably uniform views about the training, help and outreach offered by the project team. In general, they say, initial group training was "good, as training goes." But individual follow-up help is "excellent" and online communications from the project team are unequivocally well liked. Each of these points is elaborated below.

# **Initial Training**

Most respondents believe that initial group training is good mainly for "getting acquainted" with the software, for seeing how it works. But it is not enough of a base for functionality--"you can't get all of what you need [to use the software] in one class." And, for those who arrived at the

class to find the system not working, as well as those who were unable to use the system at their desks immediately after the class, the training experience was less than positive. Suggestions for improving initial group training, besides ensuring the system is operating in advance, include the following:

- Approach learning of the new software "as if it were gong to be fun and interesting instead of hard, which it is not." Take a "more experimental" stance.
- Train small groups of comparable users together.
- Make more use of a variety of learning tools. Have step-by-step procedures, using handouts; have structured exercises (like those in the PowerPoint manual); and provide paperbased cheat sheets to look at in class and to take back to the desk.
- Reconvene training sessions after initial learning and practice. "Most learning is informal. People need to have hands-on use for a while and then get together again for further learning and feedback."

The first three suggestions could be incorporated in initial training if ForeMost is rolled out to additional groups of users. The last suggests the value of refresher training sessions for extant users.

## Individual Help

Regardless of whether interviewees like or dislike ForeMost, individual follow-up help after initial training gets rave reviews as "an excellent bridge" to post-training use. In fact, such help appears to be critical for stimulating and sustaining the integration of ForeMost into actual work routines. A sample of participant comments should help explain why.

- First, assistance is timely. "People are right there with help when you need it." They're "always available."
- Further, it addresses people's particular needs. "They're willing to come and sit with you individually." "They've been very accommodating, very responsive." "They've made every effort."
- Proactive help is extremely valued. While participants might not call for help unless they are experiencing major disruptive problems, they have opportunities to advance their skills and learn new techniques when they get calls from project staff who say "I'll be in your building today--is there anything I can stop by and help you with?"

These kinds of help strategies should be given high priority in any future software roll-outs.

#### Outreach

Communications from the project team also receive commendation--both those that give project updates and those that provide "helpful hints" about how to do things faster or easier in ForeMost. Participants who have used the hints find them very practical, while many of those who have not are saving them for future reference. In general the project's use of communication tools for outreach is viewed as "creative" and "constructive."

Respondents regard the introduction of SuperUsers as a desirable supplement to both individual help and online hints for users. In fact, several interviewees suggested it would be good to have a well-trained SuperUser in every unit from the start.

#### ForeMost Assessment

After inquiring about file plan development plus training and support, the interview probed users' assessments of the new RMA software in the context of DMB work. Their responses are summarized in three categories below: ForeMost strengths, ForeMost weaknesses, and suggestions for improving ForeMost.

# ForeMost Strengths

The most frequently given response to the question "What's best about ForeMost?" is its advanced search capability. Users find it "a really great feature," better than and at least as easy to use as the normal search function in ForeMost. Some mentioned that advanced search is especially good in the context of material you haven't created yourself ("if something has been filed, you'll definitely find it"). Two respondents, in fact, suggested introducing advanced search in initial training because of its superiority and ease of use.

Along with improved ability to locate information, users mentioned some related strengths associated with ForeMost: using the system eliminates the need to print, manually file, and keep lots of paper copies; and it makes checking on the status of a task or providing documentation of task status to customers easy and efficient. Other benefits include avoiding unintentional deletion of saved material and having a repository for saved material that complies with records retention policies.

In addition, the software's customization capabilities get very positive assessments from those who use them. Besides being able to set default options, users like the ability to generate personal profiles and to change the look of the screens.

Finally, users appreciate improvements to ForeMost made during the first half of the pilot trial. These early trial users note that future groups of users will get better RMA software than they themselves received.

## ForeMost Weaknesses

To the question "What's worst about ForeMost?" the most frequent response by far, from ForeMost friends and foes alike, has to do with its cumbersomeness. "It's too time consuming to get to where you want to go," said some. "It takes too many steps even to save e-mail," said others. While users acknowledged that reductions in the number of steps required to file e-mail and documents constituted a substantial improvement over the initial version of the software, most believe it remains too effortful compared to existing alternatives for performing similar functions (e.g., a single drag-and-drop to file an item in GroupWise, or highlighting multiple messages to file all of them at once). The ForeMost interface, according to many pilot participants, "still needs to get better."

Experienced cumbersomeness also exacerbates a second problem for users. Most users would find the system vastly more helpful if it housed their extant stores of saved material (vs. only what was generated after the ForeMost roll out). But the labor-intensive nature of filing in ForeMost means that users are either unwilling or unable to invest the time it would take to deal with the backlog of saved material. And the bigger the backlog gets, the more insurmountable the filing task seems. For employees who had a good filing system in place before the ForeMost roll out, "it doesn't feel like it's worth the effort to cope with the backlog."

Additionally, special ForeMost difficulties are reported by many pilot project participants who work with Excel spreadsheets. Some have tried but never succeeded in getting their worksheets into ForeMost. Other heavy users of spreadsheets "can't imagine" using ForeMost given the very frequent changes they make; it would be "much more trouble than it's worth." Baseline interviews had surfaced such misgivings about the usefulness of ForeMost for version control and updating in spreadsheet-based information tasks. (It should be noted that version control capabilities were not mentioned as a positive aspect of ForeMost use in these interim interviews even for text-based information tasks, contrary to baseline expectations.)

Other weaknesses were cited by smaller numbers of users. Some interviewees reported that they needed to be able to correct typos in or otherwise alter the names of files in ForeMost, or to move files from one place to another; but it is seemingly difficult to enable users to do these things. Other respondents described problems involving relationships between work practices and ForeMost. For instance, working on documents while someone else is using them "still isn't comfortable;" and if two people have to update the same document, "it's unclear what's in the F:\ drive and what's in ForeMost." Further, "it's still uncertain whose job it is," in a group task, "to save e-mail and documents in ForeMost." The rules are that senders and authors are responsible, but there is considerable doubt about how widely these rules are obeyed.

Finally, for a number of pilot participants, ForeMost does not seem to offer them functionality that fulfills significant task needs. One interviewee commented that, "the average person doesn't have that much to file." Another said that, "few documents" created by one person "are needed by others." Consequently, for such employees, ForeMost seems like "just an extra program—if you don't have to learn it, why bother?" For the software to gain broader acceptance, users "need to see a visible advantage over their current work methods."

# Suggestions for Improving ForeMost

A great many suggestions for ForeMost improvements focused on filing processes. Ideally the vendor should provide a drag-and-drop method for filing e-mail in ForeMost; failing that, the number of steps required for filing should be further reduced. Second, an option should be provided for filing multiple items at once (e.g., highlighting a number of messages or files and saving them in the same folder). Third, it should be possible to move saved material efficiently from a GroupWise folder to a target folder in ForeMost.

These kinds of improvements would make it easier for users to keep up with their day-to-day filing needs, curtailing the growth of backlogs. They would also go a long way toward helping

reduce backlogs of saved materials not yet stored in ForeMost. In particular, supporting efficient transfer of material from GroupWise to ForeMost would permit third parties ("file clerks") to help users cope with their filing tasks. Most participants believe that getting full utility out of ForeMost depends on having a preponderance of needed task information in one system.

With this same principle in mind, many users currently receive a sizable portion of task-relevant documents via fax and paper mail. These users expressed the desirability of eliminating the paper processes by converting paper into digital images, or by developing solely electronic processes for receiving and storing documents. ForeMost does support the storage of digital images, in addition to e-mail, and the project team should work with these users to find methods for improving these business processes.

Finally, three ForeMost enhancements suggested by pilot participants merit attention. One user urged the creation of "smart forms" by the Records and Forms Management Division; such forms could be virtually self-filing in ForeMost when received by e-mail and saved. Another thought users should be able to add key words or other descriptors to files in an optional field for purposes of making subfolders within ForeMost. Still another recommended the automatic notification to users about documents that have met their retention requirements in ForeMost. As users continue to gain experience with RMA software, they are likely to generate more such suggestions for system enhancements.

#### Outcome Measures

As in the baseline interview, pilot participants in the interim interview were asked to put themselves in the position of the project team and address the question of where to look for tangible pay-offs from the use of ForeMost. What kinds of outcomes should be examined in the final evaluation of the pilot project?

Respondents began by detailing a number of business process efficiency pay-offs stemming from ForeMost use. Most frequently mentioned was time saved in locating records: there are no lost items, and it's easier and quicker to find what's saved; and the benefit is especially notable for older records. Users suggested simple experimental tests of these improvements. At present, timed trials could be run to determine how long it takes to find comparably old items (e.g., requests or receipts) filed in ForeMost vs. in physical file cabinets or in non-standardized electronic media. In the future, after ForeMost has been in use for a couple of years, the same kinds of tests could be conducted with even older records; participants predicted that the older the material being retrieved, the greater would be the measurable time savings associated with ForeMost use. They pointed out, for instance, that to retrieve a 2-year-old record today it's necessary to order a box and wait for it to arrive, and then to thumb through the papers; this could take more than a week. In ForeMost, by contrast, retrieval would be nearly instantaneous.

The flip side of retrieval improvements is evident in saved time and effort in initial filing for some types of records. For receipts, requests and related kinds of items, records have to be produced on paper, in triplicate; the copies then have to be separated, sorted, and manually filed in different physical folders. Use of ForeMost to retain official records eliminates some of these steps entirely while speeding up others. Again, timed trials were suggested to verify the

hypothesized efficiency gains. In addition, use of ForeMost for retaining and retrieving records should also result in saved paper and saved space.

Although efficiency gains are perhaps easiest to quantify, participants are more interested in the potential of RMA software to improve business process effectiveness. When task-relevant material is filed in ForeMost, all employees involved in the work have access to the same information at the same time. This means that any one of them can respond quickly and accurately to queries from external customers or from employees in other units (internal customers). Such a capability is all the more valuable when tasks involve workers in different buildings or widely dispersed in the same building.

However, these kinds of effectiveness pay-offs will become most evident, according to respondents, when all steps in a business process can be handled in ForeMost. Leading candidates for demonstrating such payoffs should be production-like processes that begin with requests filed in ForeMost, where ForeMost is used to track steps involved in fulfilling the request, and that end with documentation in ForeMost of request satisfaction. FED EX and UPS tracked shipping were singled out as models of the envisioned potential for end-to-end business process facilitation based on RMA software. The project team was urged to identify such processes to develop convincing outcome measures for representing business process improvements associated with ForeMost.

Finally, for many respondents the key pay-off from use of ForeMost is that it will meet federal and state legal requirements for retention of electronic records. Quite independently of what it might contribute to the efficiency or effectiveness of DMB's business processes, they contend, its major value added over current computer-supported information handling methods is that it yields official digital documentation of those processes. While this may not be intrinsically motivating, it provides a strong rationale for the necessity of using RMA software in any organization that must be accountable to the public.

## Participant Recommendations

In preceding sections, specific participant suggestions were presented in relation to particular categories of findings, such as training or ForeMost strengths and weaknesses. Here participants' more general recommendations and responses to the pilot project as a whole are described.

For regular users of ForeMost, obstacles to taking better advantage of the system could be alleviated by expanding the community of users and increasing the amount of material usable within the system. According to one participant, for instance, problems "have to do with the fact that not enough of what is needed is online now." Several ways to deal with this barrier were elicited. As mentioned earlier, providing support for putting older records now stored in GroupWise or other electronic files and folders could be provided. Further, contemporary task-relevant material generated in non-digital media (e.g., mailed or faxed documents, phoned requests) could be integrated into ForeMost.

More difficult, but more helpful in the long term, will be the development of a critical mass of regular ForeMost users. Toward this end, a number of recommendations emerged. First, according to most respondents, it is crucial to link business process improvement and electronic records management as closely as possible. As noted above, people need to perceive a "tangible advantage" in their work or "they won't bother." On the other hand, "when you begin to see some real benefit in your work, you start depending on it [ForeMost]."

Second, it is important to engender "internalized norms" and "shared work processes" among task groups. There should be group-level consensus, for instance, that all task participants will file and update in ForeMost, that senders will always take responsibility for storing group-relevant e-mail there, and so on. In sum, "there needs to be a cultural change--it will take time." But "we're going to have to do this," i.e., create, maintain, and--on demand--produce electronic records of the work done.

The importance of digital records emerges as a central theme because not all pilot participants experience direct advantages in their own work from using RMA software. Rather, immediate pay-offs are "very dependent on people's specific tasks." As anticipated in baseline interviews, processes that cross-organizational boundaries, that involve multiple participants (especially, participants in different locations or at different times), and that depend critically on documentation of each task step, are predicted to show greatest improvements from ForeMost use. Users engaged in other sorts of business processes are more likely to buy in to ForeMost if they are shown data demonstrating the measurable improvements its use brings to at least some of DMB's core functions.

Another significant step in the development of a user base could be taken if digital record concepts and policies were clarified. Several interviewees report that there is still confusion about what is a record. Further, the confusion extends high-up in the state hierarchy, where some believe that e-mail sent or received in the course of state business constitutes a record; but the others do not agree. The lack of a well-defined digital records policy means that, for those who do not see a clear task-based benefit, there are not compelling reasons to use ForeMost. Meanwhile, the impact of high-level leadership on electronic records management was succinctly captured by one interviewee who said, "If it's not being used at the top it won't be used at the bottom." Garnering high-level support should therefore be a top project priority.

The mid-project evaluation interview ended by reminding respondents that they were engaged in a pilot project to determine whether, on the basis of a year's experience, DMB should continue with the implementation of ForeMost or instead should terminate its use. The last question to pilot participants at the project's mid-point was how they would feel if ForeMost were taken away. Not surprisingly, answers were mixed. Positive responses were accompanied by such comments as "I would die" [if ForeMost was withdrawn], "It's my salvation," and "It would be like going back to 19th century recordkeeping." Negative respondents typically said, "Get rid of it? No problem!" or "People are probably trying to use it because they feel a sense of obligation" [to the project director], but "Nobody would miss it." Unswervingly in the middle, some interviewees acknowledged they did not like the software or make much use of it but nonetheless regarded electronic records management as a necessity for doing the state's business that they

would eventually have to accommodate ("bite the bullet"). The final tally was 5 positive, 4 negative, and 2 uncommitted.

#### DISCUSSION

Like the baseline interviews, these mid-project inquiries yielded candid feedback and thoughtful insights from participants that deserve careful attention by the project team. Earlier sections of this report lay out their reactions and comments in some detail. This closing section synthesizes and underscores some key results.

Integration of Business Process Support and Records Management

It is critical to integrate business process support and electronic records management concerns if ForeMost is to have broadened support. This is a key point, made in one way or another by almost all interviewees. That is, DMB business process improvements associated with the use of ForeMost must be established first, and then it should be shown how turning the resulting documentation into viable digital records is a "free" but substantial value-added benefit.

Clearly, not all business processes are equally susceptible to improvement through use of ForeMost. Nevertheless, demonstration of significant effectiveness gains that improve the performance of some core DMB activities for their clients or showing efficiency gains that make for non-negligible DMB cost savings would go a long way toward winning support from those whose own tasks do not appear to benefit in major ways from using the software.

At the same time, it is wise to stress that digital records management is a legal inevitability as well as a government responsibility under the Freedom of Information Act whenever DMB business processes are conducted using electronic media. The implication is that, if ForeMost is not the solution to this documentation need, which is inherent in doing the state's business, some other software with similar functionality will have to be chosen.

From this perspective, it is also important to provide clarification about what constitutes a record and how the definition applies to both e-mail and to other kinds of documents. For instance, it should be made clear that not all e-mail constitutes record material (e.g., invitations to lunch, workshop announcements), but some of it definitely does (e.g., customer requests or orders). Similar distinctions can be made for saved files, some but not all of which certainly belong in ForeMost. It is important to avoid giving the impression that filing large quantities of material in ForeMost is an end in itself, regardless of what is filed. More generally, the role of the informational material in a DMB business activity should serve as the basis for determining its record status rather than the medium in which it is sent or received. In the absence of an articulated digital records management policy at the highest levels of state government, a draft policy for interim guidance within DMB could be formulated.

At the same time, it would be useful to clarify norms and roles for interacting with ForeMost in the context of DMB tasks. While some rules of thumb were mentioned (e.g., it's the sender's job to save the e-mail and file it in ForeMost), it would be helpful to make these explicit and also to correct misperceptions (e.g., the preceding rule of thumb works well, but only if the message

originates within DMB; requests and orders sent via e-mail by external customers must be saved by the primary recipient). Guidance of this sort could reduce duplicate filing while helping to assure that all appropriate material makes it into ForeMost. Similar guidelines might also be formulated for group-developed documents or other types of information-based teamwork.

Finally, the project team would do well to facilitate media integration wherever possible, in an effort more closely to link ForeMost use to day-to-day work practices. Many respondents highlighted the value of having all task-relevant material filed in one place, both to serve business process needs and records management needs. Finding ways to assure that official task-relevant information exchanged by regular mail, fax or phone can be filed in ForeMost (e.g., by scanning, computerized message slips and computer-to-fax interfaces) will promote the use of ForeMost and boost the associated benefits.

## High Pay-Off Outcomes

Not all business processes benefit equally and immediately from use of ForeMost. Thus interviewees recommended targeting high pay-off areas for assessing benefits associated with ForeMost use. Most believe that any business processes requiring careful tracking, official communications with external customers, or interactions that span varied business units, are good candidates for either comparative (with vs. without ForeMost) or pre-post (before vs. after ForeMost) outcome measurement. They stressed selection of relatively small but therefore completable business processes so that a fair amount of data could be gathered before the end of the pilot period.

Several participants also endorsed controlled but representative experimental tasks for outcome assessments. Besides being useful for the evaluation, the results should have the effect of motivating those involved in the targeted task processes to move away from traditional media (e.g., faxed forms) to computerized media (e.g., online forms) once they see that the latter are more effective and efficient. These effects, in turn, should help grow the user base for ForeMost.

## Defining Special ForeMost Advantages

Although providing official documentation of business processes is the chief value added by ForeMost to the extant repertoire of computer based tools at DMB, participants recommended calling attention to other special uses with notable benefits for users. The following received the most frequent favorable mention.

- ForeMost can be used instead of e-mail to "send" a document to a very large number of people; and it is all the more advantageous when the document is likely to be updated over time.
- ForeMost is superior to other means of group storage when the stored material needs to be accessible to people in different business units who use different servers.
- ForeMost is valuable when confidence in version control is critical or highly desirable.
- ForeMost is the repository of choice whenever one person is likely to have to do someone else's job or answer questions about work done by others.

While high pay-off outcomes of the sort outlined in the preceding section are associated with specific kinds of business processes, advantages cited here could be viewed as generic business process benefits. More examples of both types can probably be identified and publicized by the project team as they continue to interact with pilot users.

## Expanding the User Base

Two directions of effort are worth exploring in pursuit of an expanded user base for ForeMost. One involves software improvements while the other has to do with enhanced user services.

Regular users appreciate improvements made to ForeMost since its initial installation and hope these will continue. For infrequent users, however, cumbersomeness is still a big barrier. Further reductions in the number of steps required to file an item in ForeMost, either through the introduction of a drag-and-drop interface or by some other means, heads the most-wanted-feature list for reluctant users. Next, participants want a method for filing in batch (moving multiple items into a given folder at one time). Finally, modifications to the interface between ForeMost and GroupWise that make it quick and easy to move sets of files from the latter to the former are highly desirable; such changes would support the reduction of backlogs of saved GroupWise material either by primary system users or by third parties ("file clerks"). It should be emphasized that if a substantial proportion of appropriate items do not get filed in ForeMost the benefits of having ForeMost are greatly vitiated.

There are undoubtedly limitations on software modifications that can be accomplished by the project team and ITSD staff without agreement and assistance from the vendor. In contrast, user services and enhancements to them are largely under the project team's control. However, interviews turned up very little room for improvement in this domain. Four ideas for service enhancement are perhaps worth exploring.

One is the idea of refresher training with small groups of comparable users, with the sessions closely based on the kinds of tasks they do. Task specific cheat sheets could make such sessions very productive. Next, advanced training could be instituted for SuperUsers, since they are expected to serve as a front line for local assistance. Especially as the user base grows, it will be good for the project team to have a back-up source for providing help.

A third suggestion has to do with job shadowing as a way to extend what this report has called "proactive help." Specifically, a pilot project team member could observe a user engaging in frequently done tasks that rely on ForeMost; afterward, the team member would suggest improved ways of handling those tasks based on better exploitation of software options with which users may not be familiar. Because job shadowing has the potential to feel intrusive, the project team should explore this idea on a very limited basis before adopting it as a regular part of its highly successful proactive help repertoire.

As a fourth added service, project team members should consider the value of making another round of file plan visits. In these visits they would learn whether users wanted additions or revisions to their current plan and, when appropriate, make them. Such visits should also allow

project team members to explore the feasibility of enabling at least some kinds of file plan modifications to be made by users on their own initiative under well defined conditions.

Finally, it is worth underscoring that, while the RMA software itself could not be called an unconditional success at the mid-point of the pilot period, it had at least as many proponents as objectors. Further, the project team is credited with doing a good job of roll-out and a great job of follow-up. ForeMost is a leading contender among software choices for electronic records management by federal and state government agencies. Other favored systems may have somewhat different constellations of strengths and weaknesses, but in the bigger picture it is probably records management activities themselves and not the particular software package that users would prefer to avoid. In the past, these activities were handled by others, such as records centers, registries, and archives. Anything that makes these new digital era responsibilities easier, faster or more transparent in information work will be very much appreciated.